

WHAT IS CLAIMED IS:

1. In a picture archiving and communication system (PACS), a method of processing raw image data at a PACS display workstation, the method comprising:

retrieving from a PACS database, using a PACS workstation, raw image data delivered from an imaging modality;

5 selecting from a PACS database, using the PACS workstation, a first preprocessing function for the raw image data delivered from the imaging modality;

processing said raw image data at the PACS display workstation by applying the first preprocessing function to the raw image data to create resultant image data.

10 2. The method of claim 1, wherein the step of retrieving raw image data further comprises retrieving frequency preprocessed raw image data.

3. The method of claim 1, wherein the step of retrieving raw image data further comprises contrast preprocessed raw image data.

15 4. The method of claim 2, wherein the step of selecting further comprises selecting a contrast preprocessing function.

5. The method of claim 3, wherein the step of selecting further comprises selecting a frequency preprocessing function.

20 6. The method of claim 4, wherein the step of selecting further comprises selecting a contrast preprocessing function characterized by at least one of a GT, GA, GC, and GS preprocessing parameter.

7. The method of claim 5, wherein the step of selecting further comprises selecting a frequency preprocessing function characterized by at least one of a RN, RE, and RT preprocessing parameter.

25 8. The method of claim 1, further comprising the step of applying an image processing function to the resultant image data to create processed resultant image data.

9. The method of claim 8, further comprising the step of displaying the processed resultant image data.

10. The method of claim 1, further comprising the step of storing the resultant image data in the PACS database for future retrieval.

5 11. In a picture archiving and communication system (PACS), a PACS display workstation comprising:

a processing circuit;

a PACS network interface coupled to the processing circuit; and

10 a software memory coupled to the processing circuit, the software memory storing instructions for: ^{Alt} _{Copy}

retrieving from a PACS database raw image data delivered from an imaging modality;

selecting from a PACS database a first preprocessing function for the raw image data delivered from the imaging modality, the preprocessing function;

15 processing said raw image data at the PACS display workstation by applying the first preprocessing function to the raw image data to create resultant image data.

20 12. The PACS display workstation of claim 11, wherein the raw image data corresponds to an anatomical region, and wherein the preprocessing function is selected based on the anatomical region.

13. The PACS display workstation of claim 11, wherein the raw image data is frequency preprocessed raw image data.

14. The PACS display workstation of claim 11, wherein the raw image data is contrast preprocessed raw image data.

25 15. The PACS display workstation of claim 13, wherein the preprocessing function is a contrast preprocessing function.

16. The PACS display workstation of claim 14, wherein the preprocessing function is a frequency preprocessing function.

17. The PACS display workstation of claim 15, wherein the contrast preprocessing function characterized by at least one of a GT, GA, GC, and GS preprocessing parameter.

5 18. The PACS display workstation of claim 16, wherein the frequency preprocessing function characterized by at least one of a RN, RE, and RT preprocessing parameter.

19. The PACS display workstation of claim 11, wherein the software memory further comprises instructions for applying an image processing function to the resultant image data.

10 20. The PACS display workstation of claim 11, wherein the software memory further comprises instructions for storing the resultant image data in the PACS database for future retrieval.

21. A medical data network comprising:

an imaging modality;

15 an image acquisition workstation;

a PACS network interfaced to the image acquisition workstation, the PACS network comprising a networked PACS image database, display workstation, and preprocessing database, and wherein the display workstation comprises:

a processing circuit;

20 a PACS network interface coupled to the processing circuit; and

a software memory coupled to the processing circuit, the software memory storing instructions for:

retrieving from a PACS database raw image data delivered from an imaging modality;

25 selecting from a PACS database a first preprocessing function for the raw image data delivered from the imaging modality, the preprocessing function;

processing said raw image data at the PACS display workstation by applying the first preprocessing function to the raw image data to create resultant image data.

5 22. The medical data network of claim 21, wherein the first preprocessing function is a contrast preprocessing function.

 23. The medical data network of claim 22, wherein the contrast preprocessing function characterized by at least one of a GT, GA, GC, and GS preprocessing parameter.

10 24. The medical data network of claim 21, wherein the first preprocessing function is a frequency preprocessing function.

 25. The medical data network of claim 24, wherein the frequency preprocessing function characterized by at least one of a RN, RE, and RT preprocessing parameter.